

Amendments to the Claims:

Listing of the Claims:

1. (currently amended) A safety detection system for a door apparatus comprising:
a plurality of linearly disposed emitters ~~each adapted to be activated to emit~~ for emitting an energy beam, ~~said plurality of emitters disposed in connection with a first controller;~~ and
a plurality of linearly disposed receivers ~~each corresponding to one of said plurality of emitters and adapted to receive~~ for receiving one of said energy beams from a corresponding one of said plurality of emitters, said plurality of receivers disposed in connection with a second controller;
wherein each of said plurality of receivers is singularly activated prior to receiving said energy beam in accordance with a scan sequence, wherein each of said plurality of emitters is singularly activated to emit said energy beam in accordance with said scan sequence, and wherein each activated one of said plurality of receivers upon receiving said energy beam deactivates and a next one of said plurality of receivers in said scan sequence is activated.
2. (original) The safety detection system of claim 1 wherein said linearly disposed plurality of emitters is disposed upon a leading edge of a door.
3. (original) The safety detection system of claim 1 wherein said linearly disposed plurality of emitters is disposed vertically.
4. (original) The safety detection system of claim 3 wherein said door comprises an elevator door.
5. (original) The safety detection system of claim 1 wherein said linearly disposed plurality of receivers is disposed upon a leading edge of a door.

6. (original) The safety detection system of claim 5 wherein said linearly disposed plurality of receivers is disposed vertically.
7. (original) The safety detection system of claim 4 wherein said door comprises an elevator door.
8. (original) The safety detection system of claim 1 wherein said energy beam comprises IR light.
9. (currently amended) The safety detection system of claim 1 wherein each of said plurality of receivers is ~~adapted to wait~~ for a predefined period of time ~~for receiving~~ to receive said energy beam.
10. (currently amended) The safety detection system of claim 9 wherein each of said plurality of receivers is ~~adapted to identify~~ identifies a beam break when said energy beam is not received within said predefined period.
11. (currently amended) A method of performing safety detection in a door apparatus comprising the steps of:
 - a) linearly disposing a plurality of emitters along a first vertical surface and in connection with a first controller;
 - b) linearly disposing a plurality of receivers each corresponding to one of said plurality of emitters along a second vertical surface and in connection with a second controller;
 - c) activating one of said plurality of receivers in accordance with a scan sequence;
 - d) activating one of said plurality of emitters in accordance with said scan sequence to emit an energy beam;
 - e) receiving said energy beam with said activated one of said plurality of receivers,

deactivating said activated one of said plurality of receivers in response to receiving said energy beam, and activating a subsequent one of said plurality of receivers as defined in said scan sequence;

- f) activating a subsequent one of said plurality of emitters in accordance with said scan sequence to emit said energy beam; and
- g) repeating steps c through f until each of said plurality of emitters and each of said plurality of receivers is activated in accordance with said scan sequence.

12. (original) The method of claim 11 wherein linearly disposing said plurality of emitters along a first vertical surface comprises disposing said plurality of emitters along an edge of an elevator door.

13. (original) The method of claim 11 wherein linearly disposing said plurality of receivers along a said vertical surface comprises disposing said plurality of emitters along an edge of an elevator door.

14. (original) The method of claim 11 comprising the additional step of constructing said scan sequence to permit synchronization of said plurality of emitters and said plurality of receivers.

15. (currently amended) A method of performing safety detection in a door apparatus comprising the steps of:

- a) linearly disposing a plurality of emitters along a first vertical surface and in connection with a first controller;
- b) linearly disposing a plurality of receivers each corresponding to one of said plurality of emitters along a second vertical surface and in connection with a second controller;
- c) activating one of said plurality of receivers in accordance with a scan sequence;
- d) activating one of said plurality of emitters in accordance with said scan sequence to emit an energy beam;

- e) receiving said energy beam with said activated one of said plurality of receivers, deactivating said activated one of said plurality of receivers in response to receiving said energy beam, and activating a subsequent one of said plurality of receivers as defined in said scan sequence;
- f) activating a subsequent one of said plurality of emitters in accordance with said scan sequence to emit said energy beam;
- g) repeating steps e through f until each of said plurality of emitters and each of said plurality of receivers is activated in accordance with said scan sequence waiting for a predefined period of time after activating one of said plurality of receivers for said receipt of said energy beam; and
- h) identifying a beam break if said activated one of said plurality of receivers fails to receive said energy beam within said predefined period of time.

16. (original) The method of claim 15 comprising the additional step of opening said elevator door after identifying said beam break.

17. (canceled)